



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

2

3 Applicant: JOHN GARLAND

4 Title: IMPROVED AUDIO CABLE

5 Serial No: 10/648,612

6 Filing Date: AUGUST 27, 2002

7 Group Art Unit:

8 Attorney Docket No: GARJ 101

9 Date: November 30, 2003

10

11 Mail Stop: Patent Applications  
COMMISSIONER FOR PATENTS  
12 P.O. Box 1450  
13 Alexandria, VA 22313-1450

14 **INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97**

15 In compliance with Applicant's and his attorney's duty of disclosure under 37 CFR  
16 1.56, the Applicant does hereby submit the following Information Disclosure Statement,  
17 Form PTO - 1449, and copies of the references listed thereon.

18 A patent search was manually conducted for the invention described in the above-  
19 referenced patent application. In the course of the search, no patents were found for an  
20 apparatus that has the same structural features or that operates in the same manner such as the  
21 invention listed above. The following eleven (11) patents, however, were noted as being of  
22 interest and are hereby brought to the Examiner's attention as references AA - AK. The  
23 significance of each listed reference is as follows:

1 AA. Reference U.S. Patent No. 6,248,954 B1 (Clark et al.) discloses an improved  
2 data telecommunications cable according to the invention includes a plurality of twisted pairs  
3 of insulated conductors, and a dielectric pair separator formed with a plurality of folds, to  
4 provide a plurality of grooves extending along a longitudinal length of the dielectric filler.  
5 Each twisted pair of insulated conductors is disposed within a groove of the dielectric pair  
6 separator. The data communications cable also includes a jacket assembly enclosing the  
7 plurality of twisted pairs of insulated conductors and the dielectric pair separator. The  
8 dielectric pair separator separates each twisted pair of insulated conductors from every other  
9 twisted pair of insulated conductors with spacing sufficient to provide a desired cross talk  
10 isolation between each of the plurality of twisted pairs of insulated conductors. With this  
11 arrangement, the data communications cable of the invention may be used in high speed data  
12 transmissions while maintaining a form factor that has desired flexibility and workability, and  
13 provides a cable that is compatible with industry standard hardware, such as plugs and jacks.  
14 The data communications cable of the invention also has the additional benefit of a reduced  
15 size.

16 AB. Reference U.S. Patent No 6,225,563 (Poulsen) discloses an improved data  
17 telecommunications cable according to the invention includes a plurality of twisted pairs of  
18 insulated conductors, and a dielectric pair separator formed with a plurality of folds, to  
19 provide a plurality of grooves extending along a longitudinal length of the dielectric filler.  
20 Each twisted pair of insulated conductors is disposed within a groove of the dielectric pair  
21 separator. The data communications cable also includes a jacket assembly enclosing the  
22 plurality of twisted pairs of insulated conductors and the dielectric pair separator. The

1 dielectric pair separator separates each twisted pair of insulated conductors from every other  
2 twisted pair of insulated conductors with a spacing sufficient to provide a desired crosstalk  
3 isolation between each of the plurality of twisted pairs of insulated conductors. With this  
4 arrangement, the data communications cable of the invention may be used in high speed data  
5 transmissions while maintaining a form factor that has desired flexibility and workability, and  
6 provides a cable that is compatible with industry standard hardware, such as plugs and jacks.  
7 The data communications cable of the invention also has the additional benefit of a reduced  
8 size.

9           AC. Reference U.S. Patent No. 6,066,799 (Nugent) discloses an improved twisted-  
10 pair interconnect that includes a first conductor and second conductor. Over the first half of  
11 the interconnect the first conductor is uninsulated and the second conductor is insulated. An  
12 insulation barrier is provided at the midpoint of the interconnect to prevent shorting.

13  
14           AD. Reference U.S. Patent No. 5,606,151 (Siekierka et al.) discloses a cable which  
15 is exceptionally suitable for high frequency signal transmission which includes at least two  
16 adjoined insulated conductors which are twisted together to form a pair. The embodiment  
17 may employ a metallic shield under the encasement.

18  
19           AE. Reference U.S. Patent No. 5,393,933 (Goertz) discloses an audio signal cable  
20 for interconnecting a power source and a load, e.g. a power amplifier and a loudspeaker,  
21 wherein the geometry of the conductors and the dielectric which separates them has been  
22 adapted to raise the capacitance and lower the inductance of the cable.

1 AF. Reference U.S. Patent No. 5,376,758 (Kimber) discloses a speaker cable  
2 assembly having sets of inductors braided about an enlarged flexible core assembly. The  
3 conductors are spirally wound about the flexible core, which is preferably filled with lead  
4 shot to provide weight to insure stability during use and operation.

5

6 AG. Reference U.S. Patent No. 5,266,744 (Fitzmaurice) discloses first and second  
7 elongate transmission lines, each having an inner conductor and a coaxial outer conductor  
8 and insulating material disposed between the inner conductor and the coaxial outer  
9 conductor.

10

11 AH. Reference U.S. Patent No. 4,954,095 (Cogan) discloses a cable especially  
12 suited to the transmission of audio-frequency signals. One or more of the conductors is  
13 tubular and are constructed and spaced apart so that the assembly approaches theoretical and  
14 empirical ideals of electrical signal transmission.

15

16 AI. Reference U.S. Patent No. 4,538,023 (Brisson) discloses an audio cable in  
17 which a plurality of outer conductors surround one or more inner conductors. The outer  
18 conductors provide a path for the relatively high frequency components of the signal and the  
19 inner conductors provide a path for the relatively low frequency components of the signal.

20

21 AJ. Reference U.S. Patent No. 3,448,222 (Greber) shows the concept on a wire  
22 helically wrapped around a central strand of wire to separate the wire from the other wire  
23 strands (see Fig. 4).

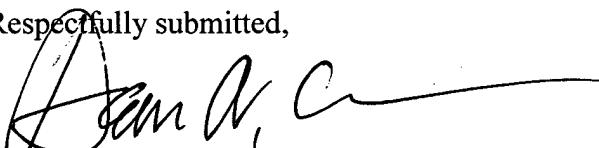
1 AK. Reference U.S. Patent No. 1,305,247 (Beaver et al.) discloses a twin core  
2 cable composed of two conductors separated by a strip of rubber or other suitable insulating  
3 material. The two conductors are twisted or spiraled around one another.

4

5 The Applicant and his attorney submit that the above-cited references taken alone or  
6 in a combination neither anticipate nor render obvious the present invention. None of the  
7 references disclose or claim an improved audio cable comprising a first conductor, a second  
8 conductor and a shielding means extending longitudinally and disposed between said first  
9 and second conductor, said shielding member being made of material capable of shielding  
10 EM and RF energy, said shielding means includes at least one lens that exposes said  
11 conductors to each other and thereby reducing inductance in said conductors while  
12 maintaining a relatively low capacitance. The listed references relate only to the general field  
13 of the disclosure and do not constitute an admission that the references are relevant or  
14 material to the claims; they are cited only as constituting the closest art of which the  
15 Applicant and his attorney are aware.

16

17 Respectfully submitted,

18   
19 DEAN A. CRAINE

20 Reg. No. 33,591

21

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23

**INFORMATION DISCLOSURE CITATION**  
*(Use several sheets if necessary)*

Docket Number (Optional) <b>GARJ 101</b>	Application Number <b>10/648,612</b>
Applicant(s) <b>JOHN GARLAND</b>	
Filing Date <b>AUGUST 27, 2002</b>	Group Art Unit

**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA.	<b>6,248,954 B1</b>	<b>06/19/2001</b>	<b>CLARK ET AL.</b>	<b>174</b>	<b>113</b>	<b>02/25/1999</b>
	AB.	<b>6,225,563 B1</b>	<b>05/01/2001</b>	<b>POULSEN</b>	<b>174</b>	<b>117</b>	<b>04/12/1999</b>
	AC	<b>6,066,799</b>	<b>05/23/2000</b>	<b>NUGENT</b>	<b>174</b>	<b>27</b>	<b>12/30/1998</b>
	AD.	<b>5,606,151</b>	<b>02/25/1997</b>	<b>SIEKIERKA ET AL.</b>	<b>174</b>	<b>113R</b>	<b>03/17/1993</b>
	AE.	<b>5,393,933</b>	<b>02/28/1995</b>	<b>GOERTZ</b>	<b>174</b>	<b>117R</b>	<b>03/15/1993</b>
	AF.	<b>5,376,758</b>	<b>12/27/1994</b>	<b>KIMBER</b>	<b>174</b>	<b>128.1</b>	<b>12/06/1993</b>
	AG.	<b>5,266,744</b>	<b>11/30/1993</b>	<b>FITZMAURICE</b>	<b>174</b>	<b>103</b>	<b>02/06/1992</b>
	AH.	<b>4,954,095</b>	<b>09/04/1990</b>	<b>COGAN</b>	<b>439</b>	<b>284</b>	<b>03/01/1989</b>
	AI.	<b>4,538,023</b>	<b>08/27/1985</b>	<b>BRISSON</b>	<b>174</b>	<b>115</b>	<b>12/30/1983</b>
	AJ.	<b>3,448,222</b>	<b>06/03/1969</b>	<b>GREBER</b>	<b>174</b>	<b>42</b>	<b>12/07/1967</b>
	AK.	<b>1,305,247</b>	<b>06/03/1919</b>	<b>BEAVER &amp; CLAREMONT</b>			<b>11/27/1918</b>

**FOREIGN PATENT DOCUMENTS**

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

**OTHER DOCUMENTS** *(Including Author, Title, Date, Pertinent Pages, Etc.)*


EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)**

Applicant(s): JOHN GARLAND

Docket No.

GARJ 101

Serial No.  
10/648,612

Filing Date  
**AUGUST 27, 2002**

Examiner

Group Art Unit

INVENTION:

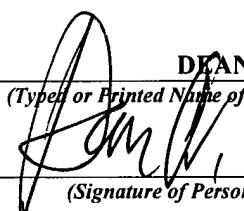
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I hereby certify that this **INFORMATION DISCLOSURE STATEMENT**  
(Identify type of correspondence)

is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

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on DECEMBER 2, 2003  
(Date)

  
**DEAN A. CRAINE**

(Type or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

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